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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,388	11/04/2003	David Hertz	23242-1023	5824

7590 12/02/2004
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EXAMINER

SHRIVASTAV, BRIJ B

ART UNIT	PAPER NUMBER
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2859

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,388

Applicant(s)

HERTZ, DAVID

Examiner

Brij B Shrivastav

Art Unit

2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-33 is/are allowed.
- 6) ☒ Claim(s) 34 and 35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 34 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Keren (US 5,160,891).

As regards to claim 34, Keren teaches method for conducting magnetic resonance imaging of a sample with a magnetic resonance imaging system having an imaging volume (column 1, lines 12-54; Examiner interprets RF body coil as RF receiving volume coil; column 1, lines 45-49), including selecting one or more antennas to receive one or more magnetic resonance signal from a sample within the imaging volume (figure 1, numerals 12-15; column 3, lines 1-39), and selecting coupling a plurality of amplifiers to the receiving antenna (figure 1, numeral 17 and 22, etc). Further, selectively connecting at least two of the amplifiers to each other (figure 1, numerals 17 and 22), and coupling at least one analog-to-digital converter to an output of at least one of the amplifiers (figure 1, numerals 42-45).

As regards to claim 35, Keren further teaches configuring the magnetic resonance imaging system to generate a field through an imaging volume, and applying a radio frequency pulse to the imaging volume to conduct magnetic resonance imaging procedure (column 1, lines 12-54).

Allowable Subject Matter

2. Claims 1-33 are allowed.

Claims 1-4 are allowed, as the prior art of record does not teach or suggest a digital signal processing system for processing one or more signals, including a switch having a first position coupling the first output of the first amplifier to the second input of the second amplifier, and a second position coupling the second input of the second amplifier to the second antenna, in combination with the remaining limitations of the claims.

Claims 5-15 are allowed, as the prior art of record does not teach or suggest a signal processing system for receiving and processing signals, including a switch having a first position coupling the first output of the first amplifier to the second input of the second amplifier, and a second position coupling the second input of the second amplifier to the second antenna, in combination with the remaining limitations of the claims.

Claim 16 is allowed, as the prior art of record does not teach or suggest a signal processing system for receiving and processing one or more signals, including a plurality of switches corresponding to the plurality of channels, wherein each switch has a first position coupling an output of one amplifier to an input of another amplifier, and a second position coupling an input of one amplifier to an output of an antenna, in combination with the remaining limitations of the claim.

Claim 17 is allowed, as the prior art of record does not teach or suggest a signal processing system for receiving and processing one or more signals, including a

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plurality of switches corresponding to the plurality of channels, wherein each switch has a first position coupling an output of one amplifier to an input of another amplifier, and a second position coupling an input of one amplifier to an output of an antenna, in combination with the remaining limitations of the claim.

Claim 18 is allowed, as the prior art of record does not teach or suggest a signal processing system for receiving and processing one or more signals, including a plurality of switches corresponding to the plurality of channels, wherein each switch has a first position coupling an output of one amplifier to an input of another amplifier, and a second position coupling an input of one amplifier to an output of an antenna, in combination with the remaining limitations of the claim.

Claims 19-20 are allowed, as the prior art of record does not teach or suggest a signal processing system for receiving and processing one or more signals, including a switch that selectively moves between a first position that couples the first output of the first amplifier to the second input of the second amplifier, and a second position that decouples the first output of the first amplifier from second input of the second amplifier, in combination with the remaining limitations of the claims.

Claim 21-29 are allowed, as the prior art of record does not teach or suggest a magnetic resonance imaging system, including a plurality of switches corresponding to the plurality of channels, wherein each switch has a first position coupling an output of one amplifier to an input of another amplifier, and a second position coupling an input of one amplifier to an output of an antenna, in combination with the remaining limitations of the claims.

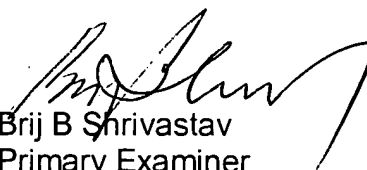
Claims 30-33 are allowed, as the prior art of record does not teach or suggest a magnetic resonance imaging system, including a switch having a first position coupling the first output of the first amplifier to the second input of the second amplifier, and a second position decoupling the first output of the first amplifier from the second input of the second amplifier, in combination with the remaining limitations of the claims.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brij B Shrivastav whose telephone number is 571-272-2250. The examiner can normally be reached on 7 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 24, 2004


Brij B Shrivastav
Primary Examiner
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